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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,870	01/21/2004	James S. Voss	200300323-1	2518

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EXAMINER

CUTLER, ALBERT H

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/762,870

Applicant(s)

VOSS ET AL.

Examiner

Albert H. Cutler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to application 10/762,870 filed on January 21, 2004. Claims 1-17 are pending in the application and have been examined by the examiner.

Information Disclosure Statement

2. The Information Disclosure Statement (IDS) mailed on July 6, 2004 was received and has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-6, 8, 9, 12-14, 16, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikari et al.(US Patent Application Publication 2004/0008274).

Consider claim 1, Ikari et al. teach:

A digital camera having a still mode and a video mode(paragraph 0029),
comprising:

a body(101, figure 1, paragraph 0031);

a mode control mechanically coupled to said body, configured to switch said digital camera between said still mode and said video mode(A main power switch(105, figure 4) allows a user to switch between still/video mode and other modes such as a playback mode, paragraph 0033. Further, a user can use a still image trigger(i.e. a still mode control mechanically coupled to said body 106, figure 4) or a motion image trigger(i.e. a video mode control mechanically coupled to said body 107, figure 4) to switch between a still mode and a motion mode respectively, paragraph 0034.);

a shutter control mechanically coupled to said body(The still image trigger(106) and the motion image trigger(107) are mechanically coupled to said body(figure 4) and act as shutter controls by starting and stopping the still or video image capture, paragraph 0034.);

a first output, configured to output a first signal when said digital camera is in said still mode and said shutter control is depressed(Trigger button(106) causes an output(i.e. a first output) which triggers the capture of a still image(i.e. a first signal) when depressed, paragraph 0034.);

and a second output, configured to output a second signal when said digital camera is in video mode and said shutter control is depressed(Trigger button(107) causes an output(i.e. a second output) which triggers the capture of a motion image(i.e. a second signal) when depressed, paragraph 0034.).

Consider claim 4, and as applied to claim 1 above, Ikari et al. further teach said first signal fires a strobe(The first signal fires a strobe(103, figures 1, 2 and 6) to illuminate a subject when the flash is in the "ON" mode or when low lighting conditions are detected, paragraphs 0037, 0049, 0050.).

Consider claim 5, and as applied to claim 4 above, Ikari et al. further teach said strobe(103) is built-in to said digital camera(See figures 1, and 2).

Consider claim 6, and as applied to claim 1 above, Ikari et al. further teach said second signal activates a continuous light source(The second signal(i.e. the video signal) activates a continuous light source(104, figures 1, 2, and 6) when shooting in "LOW LIGHT" mode, paragraphs 0038 and 0044-0046.)

Consider claim 8, and as applied to claim 6 above, Ikari et al. further teach that said continuous light source(104) comprises at least one LED(paragraph 0031).

Consider claim 9, Ikari et al. teach:

A digital camera having a still mode and a video mode(paragraph 0029),
comprising:

means for switching said digital camera between said still mode and said video mode(A main power switch(105, figure 4) allows a user to switch between still/video mode and other modes such as a playback mode, paragraph 0033. Further, a user can

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use a still image trigger(i.e. a still mode control mechanically coupled to said body 106, figure 4) or a motion image trigger(i.e. a video mode control mechanically coupled to said body 107, figure 4) to switch between a still mode and a motion mode respectively, paragraph 0034.);

means for detecting the depression of a shutter control(The still image trigger(106) and the motion image trigger(107) are mechanically coupled to said body(figure 4) and act as shutter controls by starting and stopping the still or video image capture, paragraph 0034.);

means for creating a first signal when said digital camera is in said still mode and said shutter control is depressed(Trigger button(106) causes an output(i.e. a first output) which triggers the capture of a still image(i.e. a first signal) when depressed, paragraph 0034.);

means for creating a second signal when said digital camera is in video mode and said shutter control is depressed(Trigger button(107) causes an output(i.e. a second output) which triggers the capture of a motion image(i.e. a second signal) when depressed, paragraph 0034.);

means for outputting the first signal(A still image is taken, and a flash goes off, paragraphs 0037, 0049, and 0050.); and

means for outputting the second signal(Moving image data is taken, and an illumination light is turned on, paragraphs 0038 and 0044-0046).

Consider claim 12, and as applied to claim 9 above, Ikari et al. further teach said first signal fires a strobe(The first signal fires a strobe(103, figures 1, 2 and 6) to illuminate a subject when the flash is in the "ON" mode or when low lighting conditions are detected, paragraphs 0037, 0049, 0050.).

Consider claim 13, and as applied to claim 12 above, Ikari et al. further teach means for creating a flash of light(103, figures 1, 2, 6, paragraph 0031).

Consider claim 14, and as applied to claim 9 above, Ikari et al. further teach said second signal activates a continuous light source(The second signal(i.e. the video signal) activates a continuous light source(104, figures 1, 2, and 6) when shooting in "LOW LIGHT" mode, paragraphs 0038 and 0044-0046.)

Consider claim 16, and as applied to claim 14 above, Ikari et al. further teach said continuous light source(104) comprises at least one LED(paragraph 0031).

Consider claim 17, and as applied to claim 9 above, Ikari et al. further teach said means for detecting the depression of a shutter control signal also includes means for detecting the partial depression of the shutter control(paragraph 0034).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2, 3, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikari et al. in view of Yanai et al. (US Patent 6,088,542).

Consider claim 2, and as applied to claim 1 above, Ikari et al. teach of lighting devices coupled to a digital camera(103 and 104, figures 1, 2, and 6, paragraph 0031). However, Ikari et al. do not explicitly teach of coupling a lighting device using a hot shoe mechanically coupled to the body of the camera.

Yanai et al. is similar to Ikari et al. in that Yanai et al. teach of a camera with a built in strobe(see figure 3, column 4, lines 50-62). Yanai et al. is also similarly concerned with the problem of providing accurate control of light emission using multiple lighting devices(column 3, lines 1-7).

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However, in addition to the teachings of Ikari et al., Yanai et al. teach of coupling a lighting device using a hot shoe mechanically coupled to the body of the camera(Yanai et al. teach that an external flash unit(i.e. a lighting device) can be physically coupled to a camera body using a hot shoe, column 9, lines 58-67.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to couple a lighting device via a hot-shoe as taught by Yanai et al. to a camera as taught by Ikari et al. in order to easily provide sufficient lighting capable of permitting exposure of distant subjects in low light situations(Yanai et al., column 1, lines 16-23).

Consider claim 3, and as applied to claim 2 above, Ikari et al. do not explicitly teach hot shoe electrical contacts mechanically coupled to said body, including first output and second output.

However, Yanai et al. teach hot shoe electrical contacts mechanically coupled to said body, including first output and second output(Yanai et al. teach that the hot shoe allows the flash unit to be physically mounted on(i.e. mechanically coupled to) and electrically coupled to(i.e. contacts between the flash device and the camera are electrically coupled) a camera body, column 9, lines 58-61. Said camera body includes said first output and said second output(see claim 1 rationale).).

Consider claim 10, and as applied to claim 9 above, Ikari et al. teach of lighting devices coupled to a digital camera(103 and 104, figures 1, 2, and 6, paragraph 0031).

However, Ikari et al. do not explicitly teach of coupling a lighting device to said digital camera.

Yanai et al. is similar to Ikari et al. in that Yanai et al. teach of a camera with a built in strobe(see figure 3, column 4, lines 50-62). Yanai et al. is also similarly concerned with the problem of providing accurate control of light emission using multiple lighting devices(column 3, lines 1-7).

However, in addition to the teachings of Ikari et al., Yanai et al. teach of coupling a lighting device using a hot shoe mechanically coupled to the body of the camera(Yanai et al. teach that an external flash unit(i.e. a lighting device) can be physically coupled to a camera body using a hot shoe, column 9, lines 58-67.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to non-permanently couple a lighting device via a hot-shoe as taught by Yanai et al. to a camera as taught by Ikari et al. in order to easily provide sufficient lighting capable of permitting exposure of distant subjects in low light situations(Yanai et al., column 1, lines 16-23).

Consider claim 11, and as applied to claim 10 above, Ikari et al. do not explicitly teach means for coupling said first output and said second output within said means for non-permanently mechanically coupling a lighting device to said digital camera.

However, Yanai et al. teach means for coupling said first output and said second output within said means for non-permanently mechanically coupling a lighting device to said digital camera. (Yanai et al. teach that the hot shoe allows the flash unit to be

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physically mounted on(i.e. mechanically coupled to) and electrically coupled to(i.e. contacts between the flash device and the camera are electrically coupled) a camera body, column 9, lines 58-61. Said camera body includes said first output and said second output(see claim 1 rationale). The hot shoe electrical connections provide a means to electrically couple said non-permanently connected lighting device with said first and second outputs.).

8. Claims 7 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikari et al. in view of Gotanda(US Patent Application Publication 2004/0095505).

Consider claim 7, and as applied to claim 6 above, Ikari et al. teach of a shutter control(see claim 1 rationale), a second signal which captures video(see claim 1 rationale), and that the second signal is deactivated when said shutter control is released(see paragraph 0046). However, Ikari et al. do not explicitly teach that second signal is activated when said shutter control is partially depressed.

Gotanda is similar to Ikari et al. in that a flash(24, figure 3) and an auxiliary light(18, figure 3) are used for lighting in a camera. Gotanda is further similar in that the camera has an image taking mode and a playback mode(paragraph 0032). Furthermore, Gotanda is similar in that LED's are used for the auxiliary light(paragraph 0040).

However, in addition to the teachings of Ikari et al., Gotanda teaches that a second signal is activated when the shutter control is partially depressed(Ikari et al.

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teach that a second signal both causes video capture and activates a continuous light source. Gotanda teaches that a signal which activates a continuous light source is activated when the shutter control is partially depressed, paragraphs 0037, 0063-0065. The second signal causes the auxiliary light to emit if low light conditions exist. This allows the camera to perform photometric operations with proper illumination. Once these operations are completed, and the shutter button is fully pressed, an image capturing is started, paragraph 0070. Gotanda teaches that the method in question is applicable to any image capturing apparatus, paragraph 0087.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to activate a second signal as taught by Ikari et al. when the shutter control is partially depressed as taught by Gotanda in order to accurately determine focus in low light conditions prior to image capture(Gotanda, paragraph 0005).

Consider claim 15, and as applied to claim 14 above, Ikari et al. teach of a shutter control(see claim 1 rationale), a second signal which captures video(see claim 1 rationale), and that the second signal is deactivated when said shutter control is released(see paragraph 0046). However, Ikari et al. do not explicitly teach that second signal is activated when said shutter control is partially depressed.

Gotanda is similar to Ikari et al. in that a flash(24, figure 3) and an auxiliary light(18; figure 3) are used for lighting in a camera. Gotanda is further similar in that the camera has an image taking mode and a playback mode(paragraph 0032).

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Furthermore, Gotanda is similar in that LED's are used for the auxiliary light(paragraph 0040).

However, in addition to the teachings of Ikari et al., Gotanda teaches that a second signal is activated when the shutter control is partially depressed(Ikari et al. teach that a second signal both causes video capture and activates a continuous light source. Gotanda teaches that a signal which activates a continuous light source is activated when the shutter control is partially depressed, paragraphs 0037, 0063-0065. The second signal causes the auxiliary light to emit if low light conditions exist. This allows the camera to perform photometric operations with proper illumination. Once these operations are completed, and the shutter button is fully pressed, an image capturing is started, paragraph 0070. Gotanda teaches that the method in question is applicable to any image capturing apparatus, paragraph 0087.).


Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to activate a second signal as taught by Ikari et al. when the shutter control is partially depressed as taught by Gotanda in order to accurately determine focus in low light conditions prior to image capture(Gotanda, paragraph 0005).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert H. Cutler whose telephone number is (571)-270-1460. The examiner can normally be reached on Mon-Fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571)-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

A handwritten signature in black ink, appearing to read 'Ngoc-Yen Vu', with a long horizontal flourish extending to the right.

NGOC-YEN VU
SUPERVISORY PATENT EXAMINER